DOCUMENT RESUME

ED 408 285 SP 037 385

TITLE	Research in the Classroom. Tenth Annual Report of Research Projects Conducted by Educators in Their Classrooms, 1995-1996.
INSTITUTION	Colorado State Dept. of Education, Denver. Special Education Services Unit.
SPONS AGENCY	Colorado Council for Learning Disabilities.
PUB DATE	Feb 97
NOTE	32p.
AVAILABLE FROM	Colorado Department of Education, Special Education Services Unit, 201 East Colfax Avenue, Denver, CO 80203-1799.
PUB TYPE	Reports - Research (143)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Academic Achievement; *Action Research; *Classroom Research; Computer Uses in Education; Elementary Secondary Education; *Inclusive Schools; *Learning Disabilities; Mathematics Education; Parent Participation; Portfolio Assessment; Reading Instruction; Short Term Memory
IDENTIFIERS	*Teacher Researchers

ABSTRACT

This publication contains reports on six research projects proposed, developed, and conducted by teachers in their own classrooms. The projects were conducted during the 1995-96 school year. The projects are: (1) "M..M..M..Math (Making More Meaning out of Math)" (Naomi Rose); (2) "Effect of Student Achievement as a Result of Individualized Use of Computer Technology" (Nelson S. Ford); (3) "Enhancing Short Term Memory Skills through Movement in Daily Obstacle Courses" (Judy Swanson, Terry Korsvold, and Mary Byrd); (4) "Parent Training for the Prevention of Reading Problems" (Jackie Taylor); (6) "Using Portfolio Assessment for Accountability in a Fully Integrated Classroom" (Jan Toyne and Kim Bundgaard); and (7) "The Effects of Team Building and Improved Environment in the Inclusive Classroom" (Cynthia A. Whitlock). (ND)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SP

ED 408 285

Research in the Classroom

Tenth Annual Report

of

Research Projects

Conducted by Educators in Their Classrooms

1995 - 1996

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL
HAS BEEN GRANTED BY

T Bolt

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

cde
COLORADO DEPARTMENT OF EDUCATION
Special Education Services Unit
201 E. Colfax, Room 300
Denver, CO 80203-1799

February 1997

SP 6776

BEST COPY AVAILABLE

Research in the Classroom

Ninth Annual Report
of
Research Projects
Conducted by Educators in Their Classrooms
1995-96

Sponsored by the
Colorado Council for Learning Disabilities (CCLD)
and the
CDE Special Education Services Unit

Myron Swize, Director
Special Education Services Unit

Brian McNulty, Executive Director
Office of Special Services

Richard A. Laughlin
Acting Commissioner of Education

Colorado Department of Education
201 E. Colfax, Room 300
Denver, CO 80203

Colorado State Board of Education

Patricia M. Hayes, Chairman
6th Congressional District
Aurora

Thomas M. Hower
First Congressional District
Colorado Spring

Jon Evans
Member at Large
Parker

Royce D. Forsyth
First Congressional District
Denver

Patti Johnson
Second Congressional District
Broomfield

Claire Orr
Fourth Congressional Distrcit
Kersey

Hazel F. Petrocco
Third Congressional District
Pueblo

Introduction

The Colorado Council for Learning Disabilities Research Committee is proud to present the Tenth Annual Report of Research Projects Conducted by Colorado Educators in Their Classrooms so aptly titled ***Research in the Classroom.*** We are pleased because over the past ten years nearly 80 classroom projects that contribute important information to the knowledge base of special educators everywhere have been funded through our efforts. The proposals that we receive and the classroom research projects that are conducted continue to improve in quality as educators become more adept at producing good quality research. Project funding typically ranges from $300 - $500.

Special Awards

CCLD has a long history of commitment to the professionalization of teachers. In honor of two former CCLD members and officers we have established research awards in their memory. In 1989, we established an award in the name of Audrey Eicher to honor her services to CCLD and dedication to the field of special education

In 1991, the Ellie Smucker Memorial Fund was established by her family. This fund continues to be managed and to grow so that we may honor the important work that Ellie did in the Colorado Council for Learning Disabilities for the professionalism of teachers. Each year the research committee identifies the most outstanding proposal to receive the Ellie Smucker award.

This year, CCLD lost a dear friend and colleague whose spirit and determination established the CCLD Research Award Program. Gertude Meyers was an inspiration to those of us who believe in the teacher as researcher and producer of information. When Gertude died her husband requested that donations go to the CCLD Research Committee and that the funds be used to continue to support teacher research. In response to his request, we have opened a new savings account in her memory with a donation of $100 from the CCLD general account. As other donations arrive, we will add them to this account until we are able to achieve an amount that will allow us to invest it in a more permanent form. We will name a third award each year, starting with the 1997-98 year in her honor - The Gertude Meyers Research Award.

On-going Grant Funding

We continue to raise money so that our basis for supporting teachers who conduct classroom research continues to be strong. CCLD has been designated as a tax-deductible, non-profit organization. Contributions are always welcome and may be written out to the Colorado Council for Learning Disabilities and sent to the Research Committee Chairperson. Supporting classroom researchers contributes to the welfare of teachers and to their students with learning disabilities. While funding from special awards helps make our work easier, much of the funding for teacher research continues to come from our general funds.

Research in the Classroom
10th Annual Report of Research Projects

It is with pride and sadness that we dedicate this year's report to Gertrude Meyer. We are proud that for 10 years the Colorado Department of Education Special Services Unit and the Colorado Council of Learning Disabilities has been sponsoring teachers as they undertake research on their instructional efforts (see introduction).

It is with sadness because this year for the first time Gertrude Meyer's name will not appear on the Committee Membership list. Gertrude was personally and solely responsible for the vision and the first steps that made this project a reality. Ten years ago with steadfast determination she approached the CCLD board with her idea to help teachers collect and analyze data that could drive their instructional decisions. For all of those years she has been an enthusiastic supporter of efforts to make her dream a reality.

Gertrude died last June. Among her last wishes was that this project not only continue, but that it grow and improve. All of us who knew her and benefited from her dream are now left with the challenge to see that her wishes are fulfilled. This year's research reports indicate that we are continuing and that the results are getting better and better.

We thank Gertrude for all that she contributed to the field of learning disabilities and to each of us personally. This issue of Research in the Classroom is dedicated to her.

Here is *The Tenth Annual Report of Research Projects* with love and appreciation to Gertrude Meyers.

Lois Adams, Consultant
Colorado Department of Education
Special Education Services Unit

TABLE OF CONTENTS

M..M..M..Math 1
(Making More Meaning out of Math)
Researcher: Naomi Rose

Effect of Student Achievement as a 4
Result of Individualized Use of Computer
Technology
Researcher: Nelson S. Ford

Enhancing Short Term Memory Skills 6
Through Movement In Daily Obstacle Courses
Researchers: Judy Swanson
Terry Korsvold
Mary Byrd

Parent Training for the Prevention of Reading 11
Problems
Researcher: Jackie Taylor

Using Portfolio Assessment for Accountability 15
in a Fully Integrated Classroom
Researchers: Jan Toyne
Kim Bundgaard

The Effects of Team Building and Improved 20
Environment in the Inclusive Classroom
Researcher: Cynthia A. Whitlock

CCLD Research Committee

Nancy French
Committee Chairperson

Lois Adams
Diane Bassett
Randee Bergen
Shirley Bradsbury
Sue Bechard
Joncee Feakes
Dennis Hamann
Pauline Stein
Donna Vaughters

February 1997

1995-96 Project Summaries

The summaries that follow are of projects conducted during the 1995-96 school year by teachers just like you. They have provided final reports of their work so that the field is enriched by it. We hope that their work inspires you to develop and implement a research project that will help solve some of the very difficult problems of practice in your school.

Your Future as a Researcher

If you are interested in conducting research in your own classroom, please consider applying for one of the research grants. We invite you to call on these researchers and on the CCLD Research Committee to explore your idea before submitting a proposal. We are glad to help you think your project through. We'll offer advice on how to make your project strong and your proposal reflect that strength. On the other hand, we also accept proposals that are new to us. If you have an instructional question that bears examination, consider submitting your proposal.

Final Reports on 1995-96 School Year Research Project

Each award winner is required to submit a final report of their findings. The following gives a brief overview of the purpose and intent of the project reports included in this document.

Jackie Taylor was the recipient of the Ellie Smucker Award this year. This project examined the effect of parent training on the rate of learning letters, sounds, and beginning reading concepts among kindergarten students at Zerger Elementary School in Westminster, Colorado.

The Audrey Eicher Award was given to **Nelson Ford**, at Goddard Middle School. This project examined the use of the Alpha-Smart Keyboards on learning and self-concept.

Judy Swanson, Terry Korsvold, and Mary Byrd of Douglas County School District Integrative Preschools, studied the effects of sensory stimulation and gross motor activities integrated into language arts instruction on pre-school students with learning difficulties.

Cynthia Whitlock, Elizabeth High School, Elizabeth, Colorado examined the effect of team building techniques and improvements in the school environment on the attitudes and behaviors of students with exceptionalities placed in an inclusive classroom.

Jan Toyne and Kim Bundgaard, at Edith Teter Elementary in Park County School District Re-2 in Fairplay, Colorado studied the effects of assessing student progress through the use of portfolios.

Naomi Rose, Sunrise Elementary School in Aurora, Colorado used an integrated approach to reading, writing and math to determine the growth of students in their ability to reason mathematically and to solve math problems.

Matri Taggett, Centaurus High School in Lafayette, Colorado proposed to study the effect of the use of calculators on math aptitudes at the beginning and the end of the year. No final report has been submitted for this project.

Nancy K. French, Ph.D.
CCLD Research Committee Chairperson
P.O. Box 652, 1200 Madison Street
Denver, CO 80206
(303) 871-0832

Title: M..M..M..Math (Making More Meaning out of Math)

Researcher: Naomi Rose
1830 South Jasmine Way
Denver, CO 80224

School: Sunrise Elementary
4050 South Genoa Way
Aurora, CO 80013

Statement of Problem: In order for our students to compete with highly industrialized nations, they will need to solve problems in the context of the real world. Integrating math, reading, and writing provides this natural context in a school setting.

Research Question: Will students improve their ability to communicate about mathematics, both orally and in writing, on a performance assessment integrating reading, writing, and math?

Population: Eight students in the second and third grade who have been staffed into special education. According to the IEP's, they are receiving services for math, reading, or written language. We worked together for one hour a day, four days a week for an eight week period.

Intervention: The attitude survey conducted at the beginning of the project showed that the students had limited knowledge about how math is related to other subjects in school as well as books that had math concepts in them. All students indicated that math was adding and subtracting. None of them reported anything about problem solving. The reading, writing, and math activities were a lot of fun to teach and the children enjoyed them as well. Skills in the reading and writing area that were introduced and focused on were nouns, adjectives, and verbs. The math activities centered on base 10, regrouping by 10's, counting by 10's, and solving problems where regrouping was necessary.

The books that were easiest to use were Ten Bears in My Bed, One Watermelon Seed, Ten Apples Up On Top, Bag Full of Pups and two Shel Silverstein poems - "Bandaids" and "Apples". They were easy to use because of their high interest and motivating activities.

Measurements: Students found it very difficult in the beginning to write about their reasoning. I do not think this is a task they had been involved in previously. They soon came to know the format and were able to start a response on their own. Post-test results on the performance assessment

BEST COPY AVAILABLE

included eight students. Four students were able to correctly complete the assessment as well as explain their reasoning. Three students were able to correctly answer the problem but could not clearly explain their reasoning in writing. One person did not get the correct answer or explain his reasoning.

Findings: Integrating reading, writing, and math has been beneficial to my students. I now feel that having students explain their reasoning in solving a problem needs to be an ongoing process. In order for students to do this they need to be involved in this type of activity frequently. I plan to continue to expand my resources and performance assessments to all other areas in math.

This experience did improve students' attitudes. They were involved in the activities. They enjoyed the art and math activities as well as the reading and writing activities. It was easy to implement and manage. The performance assessment that I used was a good at evaluation tool.

Implications: Sunrise uses a combination inclusion/pull-out model in servicing students with learning disabilities. It is not always easy to service the students in the classroom at their specific math, reading or writing time. Given the time allotment and subject areas to work on, I felt that this was an effective way to accomplish the students' annual IEP goals. I feel the math component motivated the students to remain involved in the activities and all were willing to work on the given assignments. The texts were enjoyable to all. The greatest gains were in written language and reading. Students were adding more adjectives into their writing and their awareness of description in written text expanded. Students had all made gains in their reading.

Budget: The $250 dollars I received was not enough to buy all the materials that I needed or wanted to implement this project. I did get extra funding from my school for another $250 which helped and I have had to use the public library and my own personal funds to ensure that there were enough multiple copies when necessary. I did use the money for two different math units: Place Value and Geometry. I feel very good about the unit that I have in place for place value. I plan to implement the geometry unit this year with a regular classroom of third graders.

Books purchased for the students to use during the reading, writing, and math lessons.

Place Value Unit:

10 Bear in the Bed
The Very Hungry Caterpillar
Bag Full of Pups
Ten Apples Up on Top

10

Secret Birthday Message
One Watermelon Seed
The King's Commissioners

Geometry Unit:

Flat Stanely
Cloak for the Dreamer
The Quilt Story
The Keeping Quilt
The Josefina Quilt Story
The Greedy Triangle
Grandfather Tang's Story
The Tangram
Color Zoo
Fishy Shape Story

Title: Effect of Student Achievement as a Result of Individualized Use of Computer Technology

Researcher: Nelson S. Ford
7570 West Friend Ave.
Littleton, CO 80123

School: Goddard Middle School
3800 West Berry Ave.
Littleton, CO 80123

Original Research Question: How can technology be used by special education students in order to improve their rate of learning?

Discussion of Progress:

a. **Population/Sample:** A total of six students participated to some degree in this program at various times during the second semester of the 1995-96 school year.

b. **Intervention:** Student 1 was not available to take the pre-test when it was originally given, and Student 7 was not identified as being a learning disabled student at that time so both students missed taking the pre-test. Due to time restrictions, only part of the pre-test was administered. The post-test was given during the last week of the school year and students had sufficient time to respond to all statements. Student 3 was unable to take the post-test due to a school suspension and Sam was absent for the week. Only Student 4 actually took both pre-and post-tests, and she was not a student who was actively engaged in using the Alpha-Smart keyboards on a regular basis.

The two students involved in using the Alpha-Smart keyboards on a daily basis were Students 2 and 3. Student 2 was to contribute to his cooperative learning group by retyping information that they wrote by hand but unfortunately, this process rarely worked. Student 2 preferred to work by himself and often sat for extended lengths of time staring into space. He was excellent on the computer but resisted doing any task imposed on him by teachers or students. His team was not able to count on him to do his part of the agreement and so they found ways to avoid relying on him.

Student 3 also agreed to retype material information written by his team's recorder but it was soon discovered that he had no keyboarding skills whatsoever and no desire to learn. Furthermore, he read at approximately a second grade level which also made it difficult for him to use the keyboard and to get meaningful work accomplished.

c. **Measurements:** A total of six students were given the Piers Harris Self-Concept Scale which consists of 80 statements to which the student responds with a "yes" or "no" answer. A number of times on both the pre-and post-tests students either skipped statements or circled both answers. In either case, the results were scored NR (No Response). Information on scoring the Self-Concept Scale was not available in the Littleton Public School district so the column labeled "correct answer" was determined by asking the question, "How would a student with a good self-concept probably answer this question?"

Results/Findings To Date: Because of all of the uncontrollable factors impinging of this study, there is no valid and/or reliable data. I intend to pursue this project during the upcoming 1996-97 school year. Changes will include the following: give the pre and post-test to all student in the core at the beginning and end of the year; automate the test giving by adapting it to a scantron answer sheet; move the keyboards from team member to team member during each week to put less pressure on LSS (Learning Support Services) students; and provide more assistance to LSS students who show interest in using the Alpha Smart keyboards

References: No new references have been added to this project

Budget: All funds ($500.00) have been spent on two Alpha Smart keyboards chargers, accessories and carrying cases

Title: Enhancing Short Term Memory Skills Through Movement In Daily Obstacle Courses

Researchers: Judy Swanson
Terry Korsvold
Mary Bryd

School: Douglas County School District Integrative Preschools
Highlands Ranch Area
C/O Cantril
Castle Rock, CO 80104

Objective: To enhance vocabulary and retention skills of preschool children with language delays by providing frequent sensory stimulation and large body movement through an obstacle course which includes specific concepts and vocabulary of story themes emphasized in the preschool classroom

Population: Eight preschool classes, consisting of one hundred and twenty students participated in the research activities. However, four children at one preschool site were selected for study measurement. All of the target students exhibited difficulties learning readiness concepts and using specific vocabulary item names in their expressive language.

Assessment: Pre-tests were administered to all four students using the Bracken Basic Concept Scale. Post-tests of the same test were recorded at the end of the preschool year. In addition, as an informal measure of expressive vocabulary, picture pre-tests for each story were given to each child that elicited specific vocabulary names. Post-tests were done at the end of each target story. Pre and post-language samples of each child retelling the target stories were also recorded.

Procedure: 1. Specific stories were chosen to be included in the preschool curriculum by regular education teachers and special education staff. Stories were read that involved high interest, language and concepts that were appropriate and important for the preschool years.

2. The transdisciplinary team designed an obstacle course which promoted sensory stimulation, gross motor development and incorporated target vocabulary/concepts as a story extension.

3. Pictures from the story representing preplanned concepts with printed phrases on them were added beside the movements to be performed. This was extremely helpful as it provided a model for the targeted language so that all adults in the room said the correct language to stimulate the target concepts/language consistently to the children.

4. All children in the preschool classes participated in the obstacle course daily.

Our original proposal was modified somewhat in the following ways:
* Timelines for the target stories changed to; Story 1 in November, Story 2, in January, Story 3 in March and Story 4 in May.
* Pretests for the Bracken Basic Concept Scale was given in January for three students.
* The story book was used for retelling the story (language sample) in place of story props.

Evaluation and Findings: 1. All four students who were given the Bracken Basic Concept Scale (pretest and posttest) reported progress of nine months to one year, two months growth in four to six months time. The increase in scores appeared to be in part due to the children's ability to take the test. They were more focused and approached the task in a more organized manner. When asked to point to a picture, the children were less impulsive and able to look at each picture more carefully. This occurred at the end of the study as the children's gross motor and attending skills improved.

2. Data collected from the informal picture expressive vocabulary pre and post-tests (teacher made materials) was compiled for each student and compared. Overall responses for using specific vocabulary names improved for each student, however one student showed minimal progress.

3. Upon reviewing each students' portfolio of preschool samples taken throughout the year, it is apparent that the students improved their abilities to retell many stories, not simply the target stories of this study.

4. When considering all the information collected during this study, it is noted that the children were more able to use prepositional concepts as well as specific vocabulary item names in their speech in general. Many times the changes observed were that the children used in-class errors for item names, yet this was an improvement from their inability to use item names in a functional manner.

5. It was observed that many physical repetitions of the obstacle course helped the children to learn more quickly the concepts/language items that were targeted. In addition, the children showed their delight and excitement in learning by taking the initiative to repeat the courses as often as possible!

Date Summary

	Pre-Test	Post-Test
Student 1	3 years, 9 months	4 years, 6 months
Student 2	4 years, 2 months	4 years, 11 months
Student 3	3 years, 8 months	5 years, 0 months
Student 4	3 years, 0 months	4 years, 1 month

STORY 1

	Picture Task Pre-Test			Picture Task Post-Test		
	Accurate	Related	Inaccurate	Accurate	Related	Inaccurate
Student 1	4	1	4	5	1	3
Student 2	7	1	1	8	0	1
Student 3	4	1	4	5	1	3
Student 4	3	1	5	6	0	3

STORY 2

	Picture Task Pre-Test			Picture Task Post-Test		
	Accurate	Related	Inaccurate	Accurate	Related	Inaccurate
Student 1	4	0	4	5	1	2
Student 2	3	1	4	7	0	1
Student 3	2	0	6	5	1	1
Student 4	1	1	6	5	3	0

STORY 3

	Picture Task Pre-Test			Picture Task Post-Test		
	Accurate	Related	Inaccurate	Accurate	Related	Inaccurate
Student 1	10	0	3	12	0	1
Student 2	11	0	2	10	1	2
Student 3	10	0	3	11	1	1
Student 4	9	0	4	10	1	2

STORY 4

	Picture Task Pre-Test			Picture Task Post-Test		
	Accurate	Related	Inaccurate	Accurate	Related	Inaccurate
Student 1	5	1	9	5	3	7
Student 2	8	3	4	8	3	4
Student 3	5	1	9	6	0	9
Student 4	6	7	2	7	8	1

Implications: 1. During this course of study, our thoughts were confirmed that an effective program for children is based on a transdiciplinary team approach in which regular and special education teachers plan and teach together on a daily basis.

2. Children that are more physically developed in regard to their sensory systems (when the functioning of these systems is appropriate for their age) approach tasks in a more organized manner and therefore complete them more readily and easily.

3. Combining the language to be learned and the motor act of performing a movement (even a small one such as signing and/or a fine motor movement) aided students in learning and retaining target concepts and language.

4. Learning is promoted to the fullest extent when all teachers, working with students, know the program parameters and follow consistently the modeling of language and motor movements.

5. A program that enhances language and motor skills for all children has been demonstrated to be effective. A classroom that has typical children as well as children with special needs is able to take advantage of the qualities of all children to help and support one another in ways that only adult to child learning is not able to do.

6. All children in the preschool classrooms enjoyed and benefited from the obstacle course presented in the way that it was this year. Children outside the study that were nonverbal improved their skills tremendously, some students improved prereading skills and began to read and others simply added new vocabulary items and expanded their skills.

Expenditures: Our budget included the three items that were felt to be most helpful to carry out the motor movements in the obstacle courses. Word and picture cards were teacher made. Our district added to the amount of money spent so that items were covered that were over the budget of $475.00 The following outline the items.

1.	Incline board	$70.00
2.	Rocking Balance Board	$65.00
3.	Gym Set	$344.00
	Total	$479.00 as a base total

Information that was learned from conducting this project: 1. Planning ahead of time is critical so that concepts and language to be targeted can be emphasized to all teachers for all students. Allowing time for all teachers to learn how to facilitate the language and the motor movements is also necessary.

2. It was a joy to study this approach more in depth as it confirmed what the team felt about the manner in which children learn best. Activities which combined language and motor facilitated many skills for our children.

3. Transdisciplinary teaming has been an integral part of our program, yet it was reassuring that it is an effective way to program for all children. Adults learn much more information this way as well.

4. Setting up the obstacle course in such a "formal" manner allowed all teachers in the room to facilitate language appropriate to our current story consistently because the picture cards with the language printed on them were a part of the course. This helped our children to learn the concepts and language in a more organized and efficient way.

5. Children love to act out stories and other familiar ideas; this provided the best basis for our expansion of their speech, motor and concept skill development. Great!!! It was lots of Fun

Resources: Our only formal resource in testing was:
Bracken Basic Concept Scale
Bruce A. Bracken, Ph.D.
The Psychological Corporation
Harcourt Brace Jovanovich, Inc.
1984 by Psychological Corporation.

Title: Parent Training for the Prevention of Reading Problems

Researcher: Jackie Taylor
7970 Garrison Court
Littleton, CO 80123

School: Zerger Elementary
9050 Field Street
Westminster, CO 80021

Research Question: Can a parent training program accelerate the learning of the alphabet, letter sounds, and concepts about print by kindergarten students who are learning at a low rate?

Discussion of Results:

Population/Sample: Twenty percent of the kindergarten student at Zerger Elementary were selected which was 20 students. Those selected were the twenty lowest to score on knowledge of upper and lower case letter names, letter sounds, and concepts of print. The students were tested twice, once in the Fall and once in January. The lowest scoring subjects were identified. These stuents' parents were invited to participate and commit to three parent presentations. One of the lowest students moved, and parents of four chose not to attend. Students next on list of priority were selected as replacements, including one student who was new to our school, to make a total of twenty students.

Intervention: Three evening workshop sessions were provided for parents of the above students, on February 22, March 13, and April 16, 1996. All twenty parents attended the first presentation, four parents did not attend the second meeting, and three parents did not attend the third presentation. Three elements were part of each evening session. The importance and use of children's literature was presented, including a video outlining the use of literature books to teach concepts, share cultures, and develop the parent/child relationship, and at each session parents could check out children's literature. Upper and lower case magnetic letters were provided to each parent to keep at home, and activities were shared to help teach upper and lower case letters. At each session, materials were provided on how to make books, and instruction was given on how to develop concepts of print. In addition to these three, the sequence of developing writing was shared, with ideas to help students begin to communicate with pictures and writing. Part of the second and third sessions were discussions by parents of what they had tried and how it had worked. Parents agreed to work 4 or 5 times a week with their child using the materials and skills introduced and practiced at parent sessions.

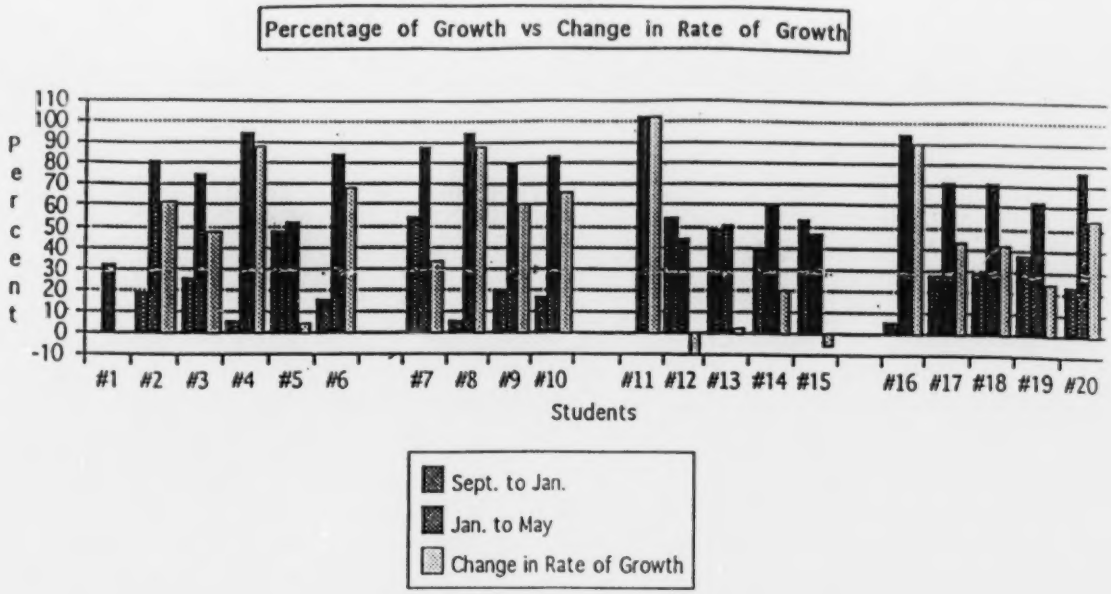
Measurement Method: All kindergartners were assessed concerning their knowledge of print, upper and lower case letter names, and letter sounds in awarded for September and January, giving one point for each item correct. Points were fifteen concepts of print, twenty-six each of upper and lower case letters, and twenty-one consonant sounds. Totals of these points were used to figure percentages. Students whose parents attended the presentations were tested in May to measure the effect of parent training on the rate of learning theses skills.

Data Analysis: At the end of May, following the training sessions, the difference in scores from September to May was used to determine the total points gained and to eliminate the effect of previous knowledge. The total points gained were then divided into the change between September and January to determine the percentage of rate of gain without intervention. Then the scores from January to May were compared to the total gain to determine the percentage of rate of gain with intervention. The difference between these two percentages was used to show the change in rate of growth as the result of intervention. The average change was also figured, and the middle score, or mode, was determined.

Results: The percentage of rate of growth following parent training increased an average of 46.3%. With the exception of one, all students increased in all areas. The range of the percentage of change in rate of growth was from 10% to 102% with the mode having a rate of growth of 48%.

An interesting pattern was noted with sounds. From September to January, all students increased their ability to name letters, but few knew sounds. The total number of sounds for all participants in January was 40 sounds. After parent training, the total number of sounds was 177 sounds, over a 400% gain!

The following graph shows the percentage of growth from September to January and January to May. The last bar shows the change in rate of growth, comparing the rate of growth before parent training with rate of growth after training. Student #1 was not at Zerger Elem. in September but her parents participated because of the teacher's concern about her achievement level. Since there was no baseline of her growth rate, only her rate of growth from January to May was included.



Among the questions that arose from the results was why two students decreased in their rate of growth. These students continued to grow but at a slightly decreased rate from January to May than from September to January, thus producing a decreased rate of growth. This may be due to the increased difficulty in successfully performing items on concept of print. Some items, such as voice/print match (being able to point to each word as a story is read to a student) take much more input to develop than such items as finding the front of a book.

Another more significant question is the effect better pre-reading skills will have on 1st grade success. Also, what impact increased parent skills and involvement will have on the child's long-range school success? These await further exploration and study.

The implications of this study seem fairly significant in that it shows that parent involvement with their child can increase the child's rate of learning of some pre-reading skills when previously they were learning at a lower rate. This information, it can lead us to provide more training for parents of students who are learning slowly.

References:

Clay, Marie (1991). Becoming Literate. Portsmouth, NH: Heineman, 1991

Clayton, May. (1995). What Can I Do to Help This Child Learn to Read? Booklet prepared by Durham Public Schools, Durham, North Carolina

Silvern, Steven. (1985). "Parent Involvement and Reading Achievement: A Review of Research and Implications for Practice." Childhood Education., 62, 44-50. Sept.-Oct.

Slavin, Robert, Nancy Karweit, and Barbara Wasik. (1993). "Preventing Early School Failure: What Works?" Educational Leadership. 50, 10-18. Dec.-Jan.

Budget: The original plan was to buy emergent reading books, allow parents to check out one at each session, and at the last session select a book to keep. We discovered we could Xerox blackline masters of emergent readers at less expense than buying them, so parents made six little books to take home at each presentation. Also literature books were purchased to loan to parents so they would have appropriate books to use for reading with their children. It was decided by the teacher that without baby sitting, many parents would not attend, so this was provided.

Literature books:	
2.26.96 BoPeep Books	$82.87
3/4/96 Bopeep Books	$38.76
Magnetic letters--upper and lower case	
2/21/96	$288.78
3 Sessions of babysitting $20x3	$60.00
KERA-TV video: Parents, Kids and Books	$19.95
18 "little books" per parent xeroxed. Balance of copies paid for by Zerger Elem.	$ 9.63
Total Spent:	$500.00

Title: Using Portfolio Assessment for Accountability in a Fully Integrated Classroom

Researchers: Jan Toyne and Kim Bundgaard

School: Edith Teter Elementary
Park County Re-2 School District
PO 189
Fairplay, CO 80440

Statement of the Problem: A more effective, more classroom oriented method for assessing the progress of students with identified learning disabilities and those deemed "at risk" was needed. The question was, could this be monitored within the context of a whole classroom accountability system?

With the impetus for inclusion of all students in the regular classroom it is imperative that the regular and special education teachers, working collaboratively, have an effective way to evaluate the progress of students. It is critical that the system be user friendly: meaning the system must be applicable for all students in the classroom and set up in a manner that involves regular timely entries by staff.

Objective: To develop a clear, accurate method of assessing the classroom performance of students with identified learning disabilities and students deemed "at risk".

Population: A third/fourth combination classroom and third grade classroom with a team teacher were included in the study. Total student population was 40 (there were a number of children who transferred in and out throughout the school year), three students with identified disabilities and eleven students considered at risk due to social or academic concerns. These fourteen identified students were present in the school for the full year.

Assessment: Each portfolio used in the project contained a rubric. In addition, samples of student work were kept throughout the year to demonstrate progress in areas of the rubric

Procedure: Teachers received training in portfolio assessment and inclusion strategies through the Institute of Educational Development.

Individual portfolios were set up for all students in both classrooms. The portfolios were maintained throughout the school year with rubrics marked on a quarterly basis, with parent conference held the first and third quarters of the year. Parent feedback was obtained through feedback forms available

during conferences. Teacher assessment was obtained directly in the form of the narrative included in the evaluation section of this report.

Student progress relative to their IEPs was assessed by the Support Services personnel at the end of the school year. This variation of the original evaluation procedure that was adopted for two reasons. First because the relationship of the portfolios to the IEP's was concern and second, the results of the proposed assessments would have been brought into question if administered in so close a time frame.

Evaluation: The parent feedback forms gave overwhelming approval to the inclusion of the portfolios in the student led conferences. All of the parents responding to the survey indicated a positive response. Key areas identified for improvement in the portfolios included: using categories for improvement that offer more clarity, the current categories are too ambiguous; including a written action plan for areas of noted deficiencies; including science and social studies skill rubrics; clarifying the learner outcomes section with more obvious home and school categories.

The correlation of student portfolios to IEP progress was high in academic areas. One student's IEP is based on a SIED classification so none of the goals or objectives were evaluated through the rubric. For the two students who did have academic IEP goals and objectives the correlation was found to be direct and progress measurable.

Objectives	Portfolio ratings
Student 1:	
1. Use cursive 90% of the time	always
2. Use complete sentences 80%	always
3. Use capital correctly 80%	always
4. Use punctuation correctly 80%	some/always
5. Use nouns correctly 90%	always
6. Use verbs correctly 90%	sometimes

1-5 were considered met based on the rubric rating and the work samples included in the portfolios. The sixth goal was considered unmet.

Student 2:

1. Correctly use -2/3 digit numbers 80%	sometimes
2. Correctly use basic X facts with flashcards	never
3. Use complete sentences 75%	sometimes
4. Write events in sequence 75%	never
5. Increase reading level to 2.6 yrs	always (basics sheet based on 2nd grade criteria

None of the goals were considered met based on the rubric ratings and the work samples.

For the group of students who were being monitored as "at risk" the portfolios provided information that indicated the following: Five students demonstrated consistent progress academically. They were unable to reach the 'always' criteria that would have demonstrated an ability to consistently do grade level or higher work, but they did show progress and did not demonstrate regression or periods of no progress.

Six of the students were identified for further assistance or assessment based on the portfolio information. Two of the students stayed at the same academic performance level for the full school year. These students were referred for counseling when it became apparent that there were personal issues affecting their school work. Two of the students showed good progress in reading and math, but stalled in the areas identified in written language. These two students are currently being screened for further assessment in this area. Two students experienced regression in their academic performance. One of the children received two head injuries during the year exacerbating an earlier injury. This child was evaluated and a 504 plan was put in place to meet his needs for modifications. The other child experienced extreme emotional problems which were in the process of being addressed, but to date the effort has been unsuccessful and the child has been unable to be in school enough to learn.

Feedback was obtained from three general education teachers and one special education instructor following the use of portfolio evaluate. The four teachers using portfolio assessment expressed a common concern for the amount of time needed for preparation and completion of the portfolio checklists. Two of the teachers waited until report card time to complete the portfolio and felt overwhelmed by the need to prepare both report cards and portfolios. This pointed to the need for continual updating of checklists as the objectives are taught and practiced. The teacher agreed that checklists were extremely valuable in reporting to parents exactly what had been taught

and the student's proficiency. Another benefit was improvement in the teacher's ability to keep instruction focused on student needs.

Findings: The concept of portfolio assessment proved to be a viable alternative for tracking the progress of academic goals for children that had IEPs. In its current form it did not prove a viable marker for measuring the social/emotional goals of IEPs. The portfolios did provide the objective documentation that is required for assessment of the appropriateness of and the progress on IEP goals and objectives.

An unexpected side benefit of maintaining the work samples in the portfolios was the ease of developing ESY (extended school year) service requests. The forms requested by BOCES (Board on Cooperative Educational Services) were easily matched to the work samples and in one case the regression criteria was demonstrated by the rubric. (This portfolio was for a student that was staffed for special services but was not a part of the study). Portfolio assessments did prove helpful in documenting the academic concerns for the children considered to be "at risk". The documentation facilitated communication with parents and other professionals in an organized sequential manner. The concrete demonstration of a lack of progress or regression in a child's academic performance gave credence to the teacher's concerns.

The suggested changes for the rubrics are well taken. In judging the percentage rates sighted in the IEP objectives, it was difficult from the rubrics themselves to interpret the meaning of "sometimes" "Never" translated into 0% and "always" translated into 90 plus % but the middle area was too broad and vague. The inclusion of work samples was used to clarify the percentage but the grid needs to be refined to reflect more objective intervals.

The learner outcome section is unclear to those who did not develop it and know that it means. The effort to bring some sense of the family's responsibility for the learner's success is important when looking at the portfolio as a tool to communicate with parents.

For the purpose of monitoring academic progress for IEPs and identifying areas of concern for students at risk, the inclusion of social studies and science information does not appear to be essential. It is the basic academic areas that are ultimately key to a child's success with learning. The idea of including an action plan may be of help for focusing the conference process and clarifying who has the responsibility for what if a change is to occur. Again this may prove another piece to providing a more effective communication tool for the teacher.

Resources:

Batzle, Janien. Portfolio Assessment and Evaluation.. CTP, 1992

Clemmons, J., et. al. Portfolios in the Classroom. Scholastic, Inc., 1993

Gahagan, H.S. Portfolio Assessment. 1993.

Winter, Lorna. Successfully Including Special Needs Students in the Regular Classroom. IED, 1994

Title: The Effects of Team Building and Improved Environment in the Inclusive Classroom.

Researcher: Cynthia A. Whitlock

School: Elizabeth High School
P.O. Box 610
Elizabeth, CO 80107

Research Question: Can team building techniques and an inviting room arrangement improve the attitudes and behaviors of students with exceptionalities who are placed in an inclusive classroom?

Discussion of Progress:

a. **Population/Sample:** As determined by Elizabeth High School Arena Scheduling (August, 1995), nine students with exceptionalities were selected for the study. Of these students, one was identified with an emotional disability, five were identified with a perceptual communicative disability, and six were identified with one or more "at risk" factors. As of the conclusion of this study, one student of the original group had left the class to pursue a vocational course of study; one student was expelled from school; one student was removed from class and placed in a remedial social studies class; and one student was placed on independent study at his request.

b. **Intervention:** Pursuant to the original proposal, the researchers purchased the following items for a high school social studies classroom: a carpet remnant, peach wall paint, large throw pillows, inspirational posters, film for taking class pictures, and craft supplies. A reading center was established in one corner of the classroom, inspirational posters were placed on the walls, and a "Student Superstars" bulletin board was organized.

c. **Measurements:** Three separate measurement tools were used for this study. First, informal behavioral observation checklists were used to record the observations of the two classroom researchers. Second, questionnaires to ascertain student responses to the improved environment and team building procedures were administered at the beginning of the school year, and at the end of all four quarters. Third, photographs of the room showing the decor at the end of the 1994-1995 school year (preimprovements) were taken. Photographs were again taken after the installation of the improvement items, and at the end of first and second semesters to document the level of respect that students had develop for the improved environment.

d. **Data Tabulation/Analysis:** Teacher Observation Checklists from all quarters were compared to determine if any changes could be noted in class behaviors. Based on a five point rubric, students were evaluated in behavior areas such as "Refrains From Cursing and Swearing." Points for each quarter were then averaged to determine if an overall change could be noted (See attached Table "A"). Student questionnaires were analyzed to track student feedback from one quarter to the next (See attached Table "B"). Before and after photographs were examined to note any positive or negative changes to the room arrangements (See attached photo page).

Results/Findings: Findings in this study indicate the educators who are interested in implementing a successful inclusion model may need to make a closer examination of the impact of extraneous factors on the performance of exceptional students placed in the inclusive classroom

TABLE "A"

TEACHER OBSERVATION CHECKLIST

STUDENTS	ATTENDANCE	CLASS WORK	COOP. LRN/SOC.	BEHAVIOR
A	+ 5	+8	+12	+9
B	+ 1	+9	+ 4	+ 1
C	+ 14	+10	+ 10	+ 23
D	WORK STUDY	***	***	***
E	EXPELLED	***	***	***
F	+ 2	- 1	+ 3	+ 2
G	REMEDIAL	***	***	***
H	INDEP STUDY	***	***	***

TABLE "B"

STUDENT QUESTIONNAIRE

ITEM	POS.	NEG	ITEM	POS.	NEG.
ROOM CHGS.	5	0	MORE LEARNING	4	1
GROUP ACTIVITIES	5	0	STD. ATTITUDE	3	2
COMFORT LEVEL	4	1	PEER RELATIONS	5	0
ROOM CARE	5	0	VALUE OF EDUC.	5	0

References:

Bender, W.N. (1989). "Generalization and setting specificity of behavioral deficits among learning disable students." LD Research, 4, 96-100.

Kolb, T.L., & McLeod, T.M. (1989). Social skills and success in the high school mainstream: A comparison of teachers' and students' perceptions. Unpublished manuscript. (ERIC Document Reproductions Service No. ED 349 756)

Tamaren, M.C. (1992). I make a difference! A curriculum guide building self-esteem and sensitivity in the inclusive classroom. (ERIC Document Reproduction Service No. ED 350-808)

Budget:

Furniture and Carpet	$175.00
Posters and Wall Paint	$90.00
Film and Craft Materials	$35.00
Total	$300.00

CCLD Research Committee
P.O. Box 562
1200 Madison St.
Denver, CO 80206

Proposal Cover Sheet and Committee Evaluation Form

Lead Applicant Personal Information: (co-applicant info. included on attached pages)

Name:

Home Address:

City, State, Zip:

Home Phone:

Lead Applicant Professional Information:

School Name:

School Address:

City, State, Zip:

School Phone:

Your Position or Title:

Research Committee Member:_____ Ratings:

Proposal Components	Not Present.....Present / Adequate..... High Quality
Title of Proposal	1 2 3 4 5 6 7 8 9 10
Research Question	1 2 3 4 5 6 7 8 9 10
Rationale	1 2 3 4 5 6 7 8 9 10
Research Design Components a. Population / Sample	1 2 3 4 5 6 7 8 9 10
b. Intervention	1 2 3 4 5 6 7 8 9 10
c. Measurement Tool / Method	1 2 3 4 5 6 7 8 9 10
d. Data Tabulation / Analysis	1 2 3 4 5 6 7 8 9 10
e. Timeline	1 2 3 4 5 6 7 8 9 10
Budget	1 2 3 4 5 6 7 8 9 10
Dissemination Plan	1 2 3 4 5 6 7 8 9 10
References	1 2 3 4 5 6 7 8 9 10
____Funded Amount _____ ____Not Funded	Total Points Assigned by Reader: _____

BEST COPY AVAILABLE

CCLD Research Committee
P.O. Box 562
1200 Madison St.
Denver, CO 80206

Format for Midyear (Due: January 31) / Final (Due: June 15) Report

Two reports are required. Midyear and Final Reports should consist of this cover sheet and a two page typed document that contains the informauon listed in the table in Section II below. Submit both the midyear and the final report to the address above.

Section I:

Lead Researcher Professional Information:

Name:

Home Address:

City, State, Zip:

Home Phone:

Lead Researcher Personal Information:

School Name:

School Address:

City, State, Zip:

School Phone:

Section II:

Report Components	Specific Directions:
Title of Original Proposal	List the original title or explain changes
Original Research Question	List the original question or explain changes
Discussion of Progress a. Population / Sample	Describe the actual subjects of the study, how they were selected.
b. Intervention	Describe the actual intervention. Explain changes from original proposal. List or describe materials relevant to the intervention.
c. Measurements	Tell what measurements you used and how you used them.
d. Data Tabulation / Analysis	Describe how you have tabulated the data. Explain any changes from the original plan.
Results / Findings To Date	Describe findings relevant to the research question. Include charts or tables that summarize the data. Tell what new questions arose through data analysis. Tell what implications you think your research provides for the field.
References	Add new references that were not included in the original proposal if applicable.
Budget	List expenditures to date. Explain changes from original proposed budget.

BEST COPY AVAILABLE